



KASB 2019-20 Enrollment Projections

Introduction

This report summarizes the findings from the KASB 2019-20 Enrollment Projections and describes the new methods KASB members can use to access this information.

Key Findings

KASB's enrollment projections for the 2020-21 through 2024-25 school years indicate:

- Total enrollment will decline from 499,331 in 2019-20 to 487,665 in 2024-25. This represents a 2.3% decline in the total student population.
- No notable change is expected in the percent of students eligible for English language learner status, free or reduced-price lunch, or special education.
- No notable change is expected in the gender, race, or ethnic makeup of the student population.

Birth Data

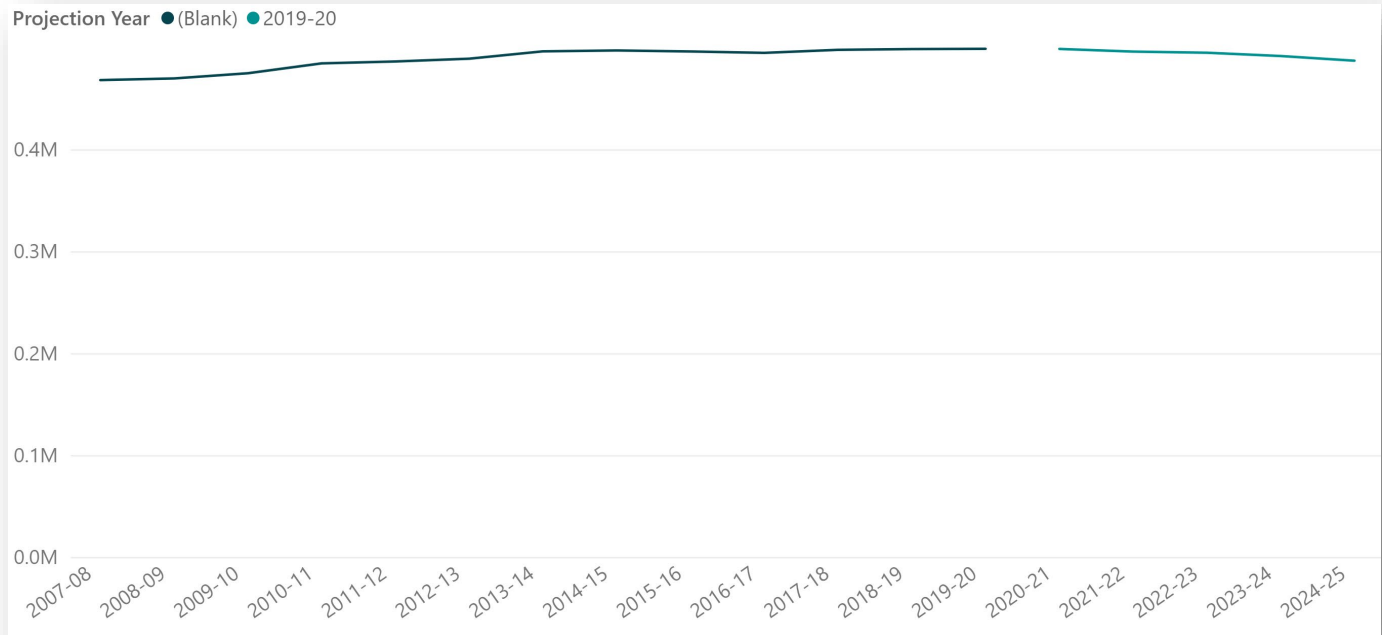
KASB's enrollment projections rely on both historical enrollment data and county-level live birth statistics. The following table shows births by school year from 2007-08 through 2017-18.

School Year	Births	% Change	Cumulative % Change
2007-08	41,786		
2008-09	41,321	-1.1%	-1.1%
2009-10	40,994	-0.8%	-1.9%
2010-11	39,764	-3.0%	-4.8%
2011-12	39,917	0.4%	-4.5%
2012-13	39,224	-1.7%	-6.1%
2013-14	39,400	0.4%	-5.7%
2014-15	38,902	-1.3%	-6.9%
2015-16	38,638	-0.7%	-7.5%
2016-17	37,094	-4.0%	-11.2%
2017-18	36,185	-2.5%	-13.4%

As the table shows, in the past decade there was a 13% decrease in the number of children born in Kansas each school year. With the number of children born in Kansas declining, enrollment numbers can be expected to continue to decline.

Total Enrollment

The following chart and table show the total enrollment by school year. Data from 2007-08 through 2019-20 is actual, and data from 2020-21 through 2024-25 is projected.

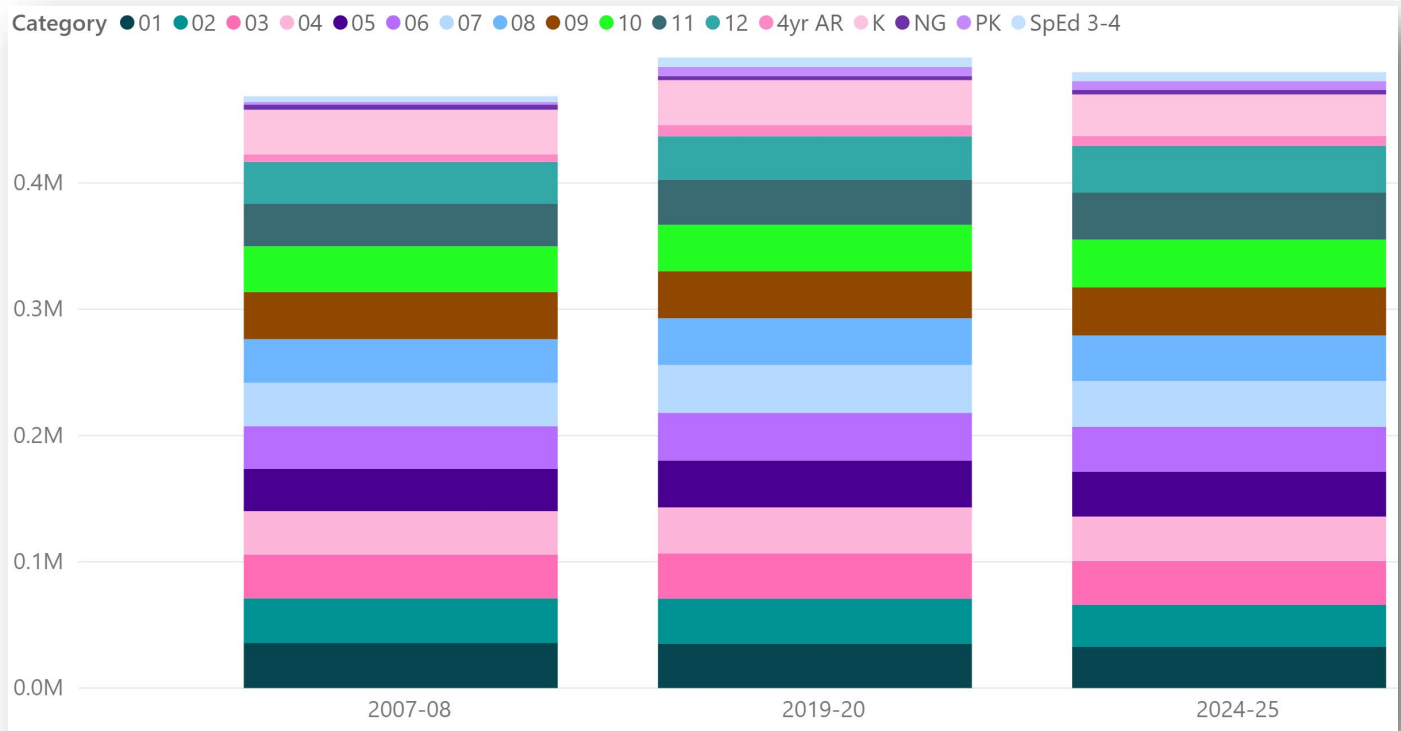


School Year	Total Enrollment	% Change	Cumulative % Change	Projected % Change	
2007-08	468,704				
2008-09	470,316	0.3%		0.3%	
2009-10	475,373	1.1%		1.4%	
2010-11	485,082	2.0%		3.5%	
2011-12	486,956	0.4%		3.9%	
2012-13	489,582	0.5%		4.5%	
2013-14	496,903	1.5%		6.0%	
2014-15	497,778	0.2%		6.2%	
2015-16	496,739	-0.2%		6.0%	
2016-17	495,356	-0.3%		5.7%	
2017-18	498,317	0.6%		6.3%	
2018-19	499,034	0.1%		6.5%	
2019-20	499,331	0.1%		6.5%	
2020-21	499,231	0.0%		6.5%	0.0%
2021-22	496,542	-0.5%		5.9%	-0.6%
2022-23	495,498	-0.2%		5.7%	-0.8%
2023-24	492,263	-0.7%		5.0%	-1.4%
2024-25	487,665	-0.9%		4.0%	-2.3%

Though enrollment has been increasing slightly since 2016-17, the projections suggest that the total will remain essentially level next year then begin declining, with an overall decrease of 2.3% by 2024-25.

Grade Levels

The following chart and table show the enrollment by grade level for 2007-08, 2019-20, and the projected 2024-25 numbers.



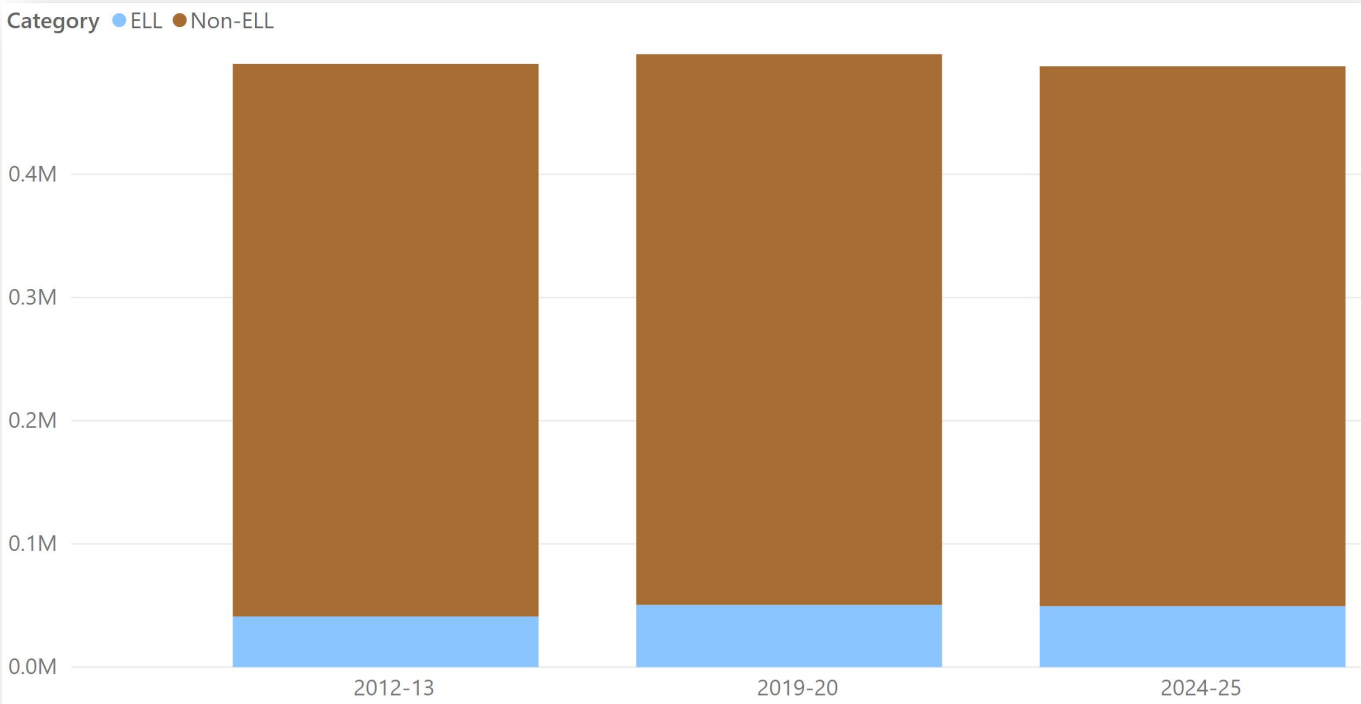
Category	2007-08		2019-20			2024-25		
	Count	% of Total	Count	% of Total	% Change	Count	% of Total	% Change
K	35,462	7.6%	35,521	0.2%	-0.5%	32,769	6.7%	-7.7%
1	35,751	7.6%	35,217	-1.5%	-0.6%	32,626	6.7%	-7.4%
2	35,284	7.5%	35,602	0.9%	-0.4%	33,318	6.8%	-6.4%
3	34,688	7.4%	35,668	2.8%	-0.3%	34,790	7.1%	-2.5%
4	34,366	7.3%	36,584	6.5%	0.0%	35,077	7.2%	-4.1%
5	33,470	7.1%	37,123	10.9%	0.3%	35,571	7.3%	-4.2%
6	33,823	7.2%	37,814	11.8%	0.4%	35,591	7.3%	-5.9%
7	34,338	7.3%	37,873	10.3%	0.3%	36,140	7.4%	-4.6%
8	34,555	7.4%	36,962	7.0%	0.0%	36,139	7.4%	-2.2%
9	37,431	8.0%	37,345	-0.2%	-0.5%	38,219	7.8%	2.3%
10	36,173	7.7%	36,735	1.6%	-0.4%	37,671	7.7%	2.5%
11	33,781	7.2%	35,535	5.2%	-0.1%	37,281	7.6%	4.9%
12	33,005	7.0%	34,516	4.6%	-0.1%	36,975	7.6%	7.1%
SpEd 3-4	4,676	1.0%	7,428	58.9%	0.5%	6,960	1.4%	-6.3%
4yr AR	5,875	1.3%	8,949	52.3%	0.5%	7,930	1.6%	-11.4%
PK	1,963	0.4%	7,229	268.3%	1.0%	6,883	1.4%	-4.8%
NG	4,063	0.9%	3,230	-20.5%	-0.2%	3,727	0.8%	15.4%
K-12	452,127	96.5%	472,495	4.5%	-1.8%	462,165	94.8%	-2.2%
Total	468,704	100.0%	499,331	6.5%	0.0%	487,665	100.0%	-2.3%

As the table shows, there is not much change in the overall distribution of students by grade level as a percent of the total student population. However, when you look at the percent change in number of students by grade, there is a notable decrease in the lower grades and a notable increase in the higher grades, suggesting that Kansas should expect a continued decline in the overall student population past 2024-25.

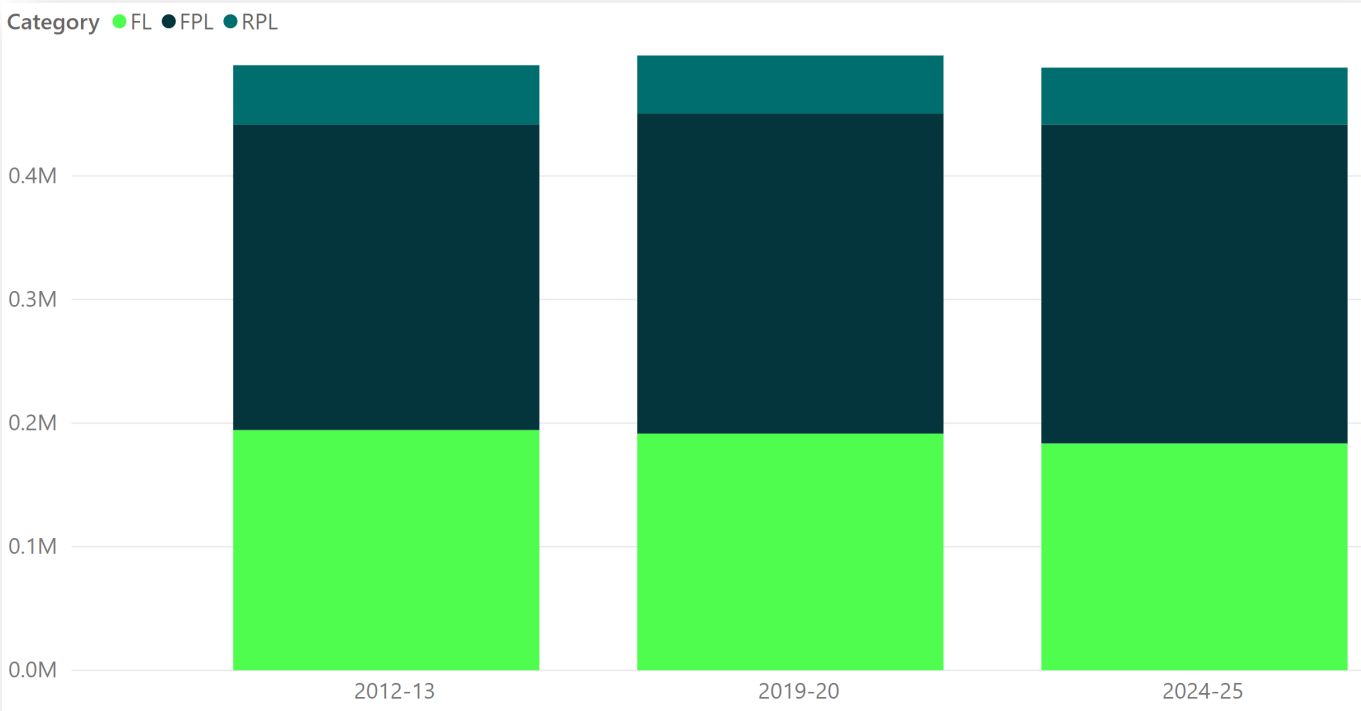
Program Participation

The following charts and table show the information on program participation for 2012-13 (the earliest year for which we have the data in this format), 2019-20, and the projected numbers for 2024-25.

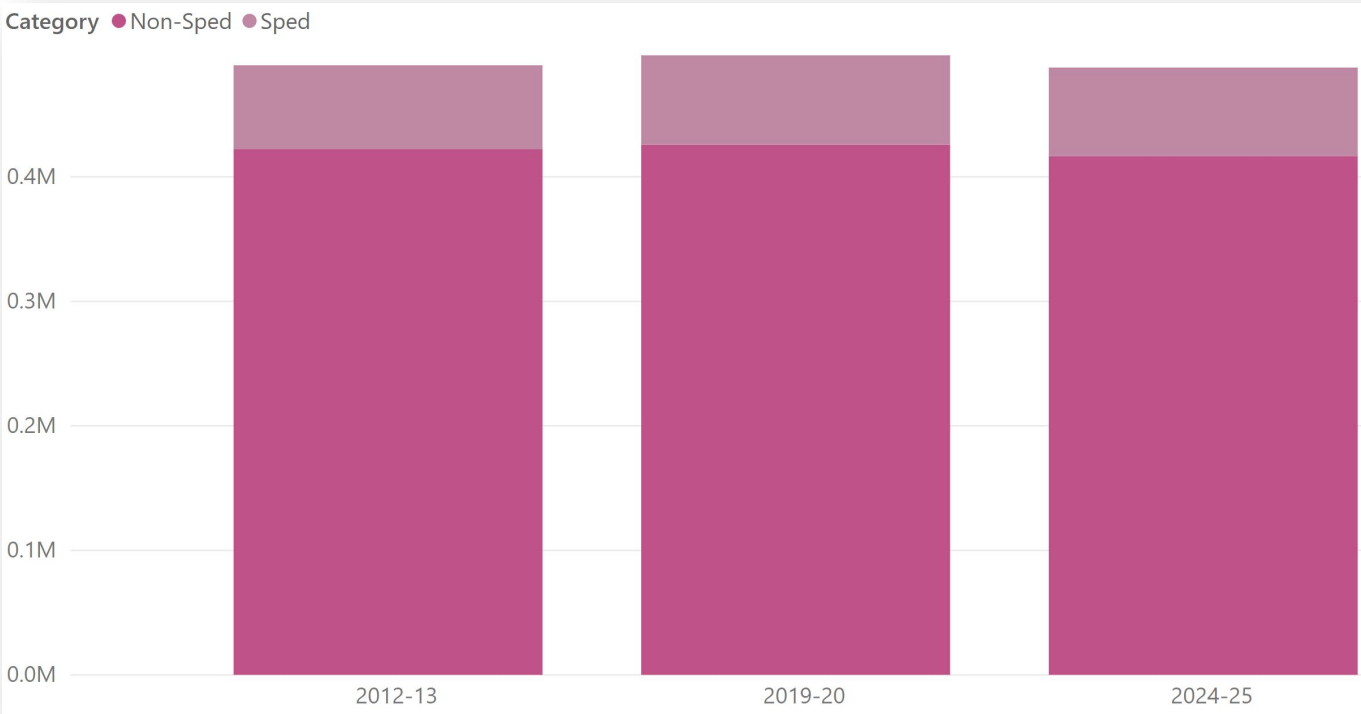
ELL



Lunch



Special Education



Table

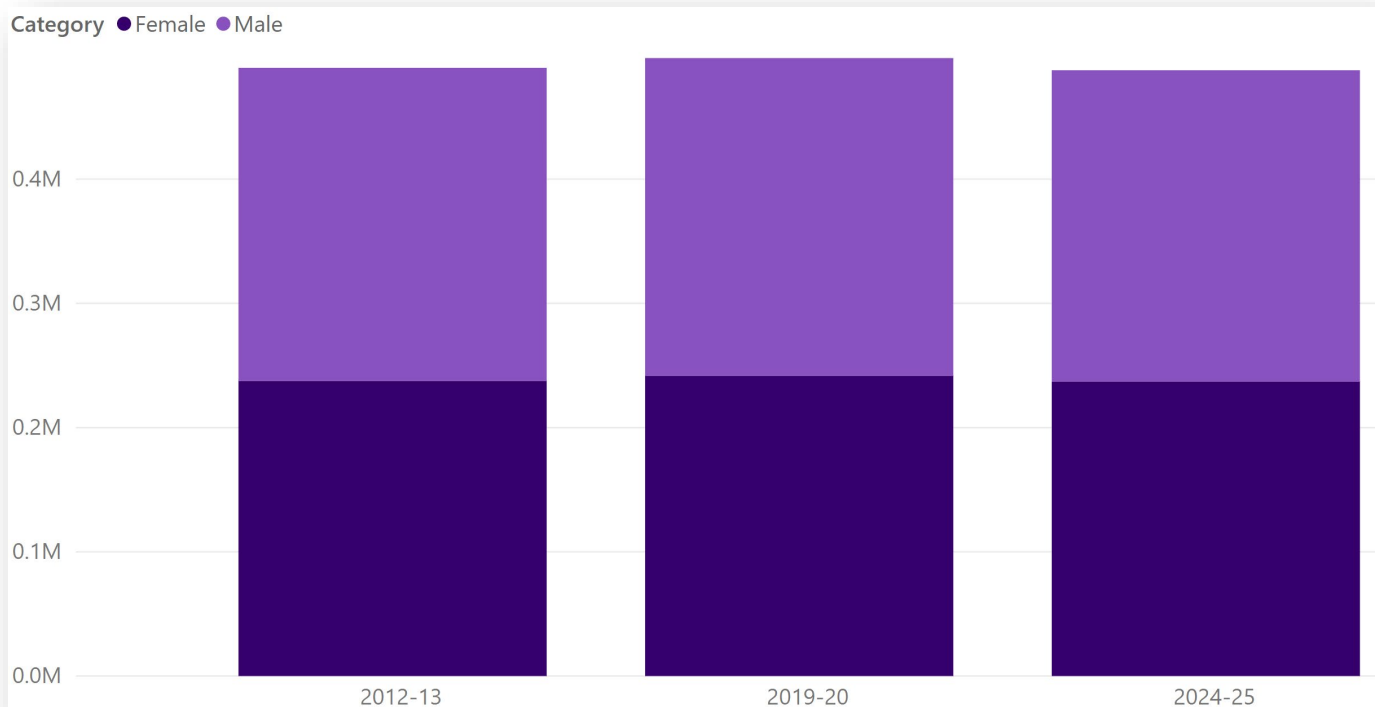
Category	2012-13		2019-20			2024-25		
	Count	% of Total	Count	% of Total	% Change	Count	% of Total	% Change
ELL	41,093	8.4%	50,498	10.2%	22.9%	49,485	10.2%	-2.0%
Free Lunch	194,407	39.7%	191,537	38.5%	-1.5%	183,584	37.7%	-4.2%
Reduced-Price Lunch	47,899	9.8%	47,045	9.5%	-1.8%	46,083	9.5%	-2.0%
Special Education	67,285	13.7%	71,910	14.5%	6.9%	71,090	14.6%	-1.1%

As can be seen, there is very little change expected in the percent of students participating in ELL, Free or Reduced-Price Lunch, or Special Education services.

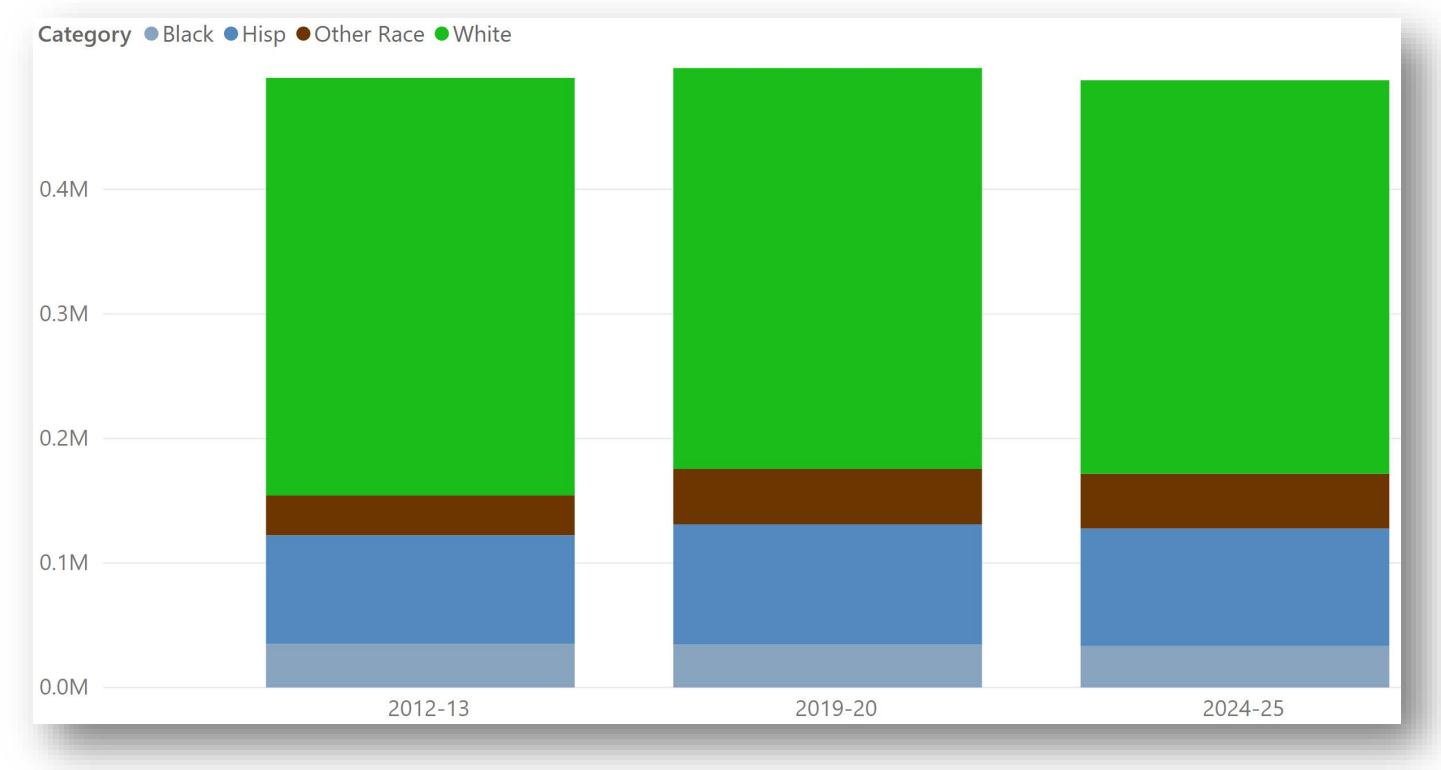
Demographics

The following charts and table show the information on demographics for 2012-13 (the earliest year for which we have the data in this format), 2019-20, and the projected numbers for 2024-25.

Gender



Race and Ethnicity



Table

Category	2012-13		2019-20			2024-25		
	Count	% of Total	Count	% of Total	% Change	Count	% of Total	% Change
Male	251,970	51.5%	255,702	51.4%	1.5%	250,552	51.4%	-2.0%
Female	237,612	48.5%	241,744	48.6%	1.7%	237,099	48.6%	-1.9%
White	335,375	68.5%	321,850	64.7%	-4.0%	316,011	64.8%	-1.8%
Hispanic	87,209	17.8%	96,552	19.4%	10.7%	94,282	19.3%	-2.4%
Black	35,123	7.2%	34,501	6.9%	-1.8%	33,449	6.9%	-3.0%
Other Race	31,875	6.5%	44,558	9.0%	39.8%	43,923	9.0%	-1.4%

As the data shows, there is very little change predicted in the overall percent of students by gender, race, or ethnicity.

District-Level Data

KASB has the data described above available for each district on the following page:
<https://kasb.enviseams.com/member-resources/district-level-data/kasb-enrollment-projections>

To access this data, you can follow the link above, or log into the KASB Member Portal at <https://kasb.org/member-portal/> then click on the “Member Resources” menu, hover over the “District-Level Data” item and then select “KASB Enrollment Projections” from the submenu. If you need assistance logging on to the Member Portal, email pinpoint@kasb.org.

Methodology

The following describes the methods used for developing the Enrollment Projections contained in this report. This method is based on the one used by KASB for many years, but was enhanced and expanded as of the 2014-15 school year.

Initial Data

KASB acquires unaudited enrollment counts and the percent enrolled who qualify for free lunch, reduced-price lunch, and full-price lunch from the Kansas State Department of Education (KSDE) via <https://datacentral.ksde.org/>.

KASB acquires county-level birth data by month from the Kansas Department of Health and Environment via their Annual Summary of Vital Statistics (http://www.kdheks.gov/data_reports_stats.htm).

Ratio of Birth to First Grade Enrollment

Total resident live births by county and school year are calculated using monthly births from September of one year through August of the following year; consistent with the birth dates used to determine age of eligibility for attending first grade. The birth data by county is then tied to the district-level enrollment data based on all counties that the district boundaries cross.

Because of some of the challenges with kindergarten data, KASB utilizes a ratio of births by school year to first grade enrollments seven years later; when the children would be turning seven years old and therefore be eligible for first-grade enrollment.

This ratio, which serves as a comparison between children born in the district to the number of students enrolling in first grade within the district seven years later, serves as the basis for the enrollment estimates for the district. Limitations of this ratio include the fact that it does not take into account children moving into or out of the district's boundaries, and also that the county to school district relationship is not a perfect one; as other school district boundaries also cross the counties used for many districts' calculations.

In order to estimate the first grade enrollment numbers for future years, a five-year rolling average is utilized. Such an average is calculated by determining the average ratio for the past five years in order to create the ratio for the first year of the projection, then taking the ratio for the past four years plus the ratio calculated for the first year of the projection and averaging them in order to create the ratio for the second year of the projection, and so forth. Rolling averages are commonly utilized in order to minimize the impact of short-term fluctuations or deviations on the overall projections.

The calculated ratios for five years' worth of school years are then applied to the actual resident live births in order to determine estimated first grade enrollment numbers.

Cohort Survival Ratios

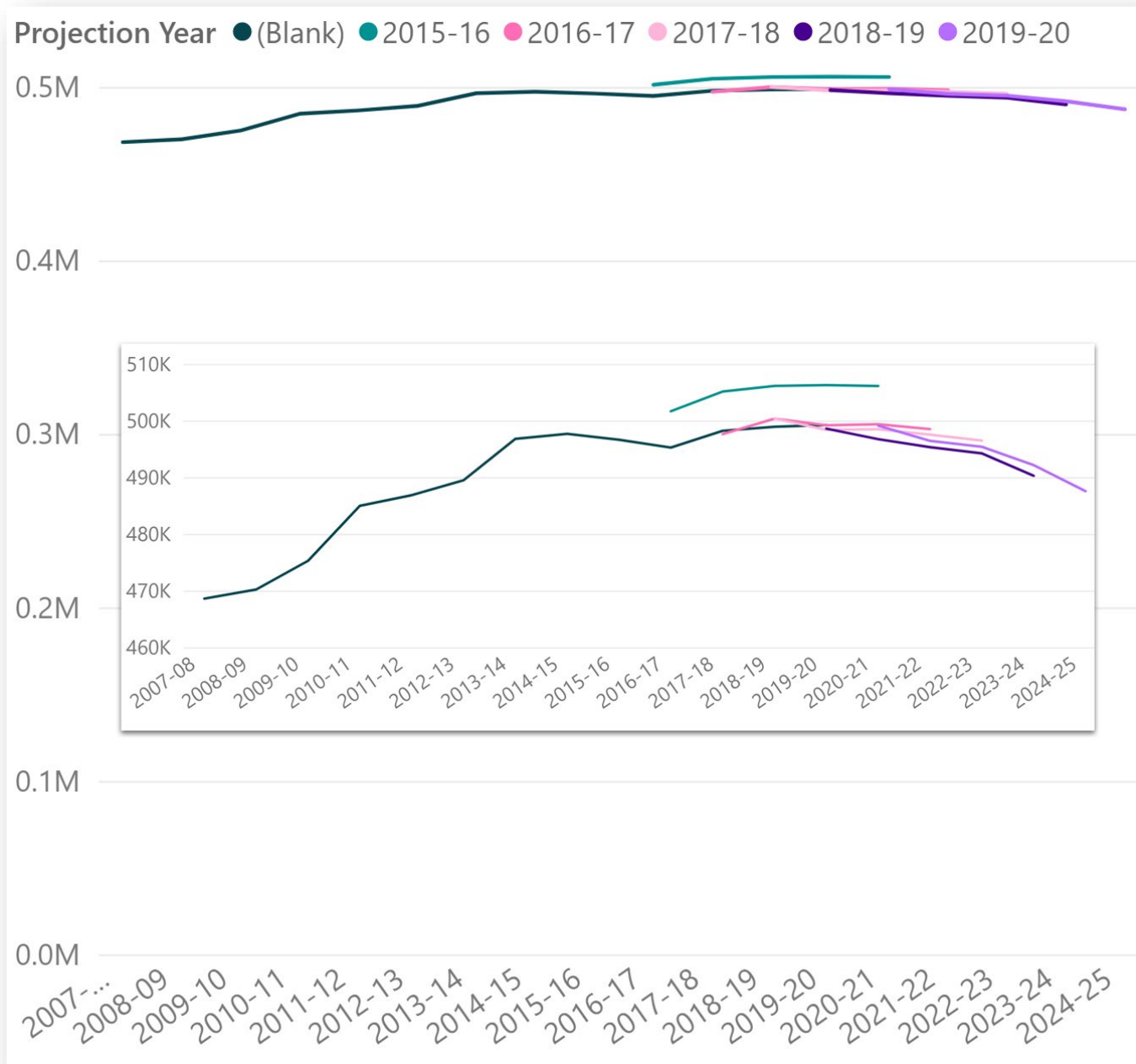
For all other grade levels 2 through 12, a cohort survival ratio is calculated and utilized. The cohort survival ratio determines the relationship between the number of students at a particular grade level one year and the number of students at the next grade level the following year. For kindergarten, the ratio is calculated backwards; determining the ratio of the number of students in first grade one year and the number of students in kindergarten the year prior. Again for these calculations a five-year rolling average is utilized.

Demographics

Free, Reduced, and Full Price lunch information was taken from KSDE's CPFS reports and five year averages were calculated for the five projected years. Gender, Race, Economic Disadvantaged, ELL, and Special Education data is taken from KSDE's Report Card Data, where it is presented in percent format, and used to estimate the headcounts numbers based on total enrollment. Five year averages for the percentages were calculated for the five projected years and used to estimate the headcounts based on the total projected enrollment.

Accuracy and Limitations

KASB calculates the accuracy of its enrollment projections as actual data becomes available to compare to the initial estimates. As the following chart and table show, the estimates for the past four years have predicted the actual values with a fairly high degree of accuracy, particularly compared to the 2015-16 projections, which were much higher than the actual numbers.



School Year	Actual #	Predicted Enrollment									
		2015-16		2016-17		2017-18		2018-19		2019-20	
		#	% Error	#	% Error	#	% Error	#	% Error	#	% Error
2007-08	468,704										
2008-09	470,316										
2009-10	475,373										
2010-11	485,082										
2011-12	486,956										
2012-13	489,582										
2013-14	496,903										
2014-15	497,778										
2015-16	496,739										
2016-17	495,356	501,763	1.3%								
2017-18	498,317	505,245	1.4%	497,727	-0.1%						
2018-19	499,034	506,230	1.4%	500,467	0.3%	500,481	0.3%				
2019-20	499,331	506,387	1.4%	499,288	0.0%	498,478	-0.2%	498,705	-0.1%		
2020-21		506,222		499,483		498,590		496,842		499,231	
2021-22				498,614		497,635		495,427		496,542	
2022-23						496,593		494,333		495,498	
2023-24								490,383		492,263	
2024-25										487,665	

The accuracy of the predictions at the state level is higher than for each individual district, as KASB's estimate does not take into consideration things such as commercial and residential development or other factors that could influence increases or decreases in student enrollment within individual public school districts, so these estimates should be viewed in light of all information available about what might impact district-level enrollment.

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